[1] The panel PC will not power on. (Green LED on front of unit is not lit)

The troubleshooting process always starts with identifying what works. If the problem is power related the first step is establishing that power is getting to the computer.

This means checking that the LED on the transformer brick is lit, and if it isn't, that it's plugged into a good power outlet. You can check that by unplugging the transformer and simply plugging in a lamp.

If the transformer is plugged in to a known good outlet, and the LED on the transformer is on and steady, make sure the transformer is securely connected to the panel PC

If the power adapter light is blinking it mean the power adapter is defective. Please replace it.

If you have positive power status and the system simply won't turn on, it could be a switch failure, but it's more likely a power regulation or mainboard failure.

[2] The system powers on but there is no display. (Green LED on front of unit is lit)

Please make sure the memory module is installed properly.

The PPC17A and PPC19A both have the external VGA port that allows you to connect to a second display unit. Connect a secondary display if possible and check for video. If there is video, verify the display properties have the integrated LCD listed as active.

Follow the directions for resetting the BIOS per the user's manual.

If the power indicator on the top of the PPC computer lights up, but there is no display on the main LCD screen (but the external VGA port displays ok), the inverter or the backlight is defective.

[3] At system power up, the screen shows "Reboot and Select proper boot device or Insert Boot Media in the selected Boot device and press a key."

This error message tells you that the system either doesn't have a proper boot device installed (i.e., hard drive, compact flash card, or solid-state drive) or the cable to the device is not connect properly.

Ensure there is no USB mass storage device connected at boot up, especially if the BIOS is set to allow a USB Storage Device as a boot device.

If, after checking all of the above, the system still shows the error message, the mainboard or the boot device is likely the root cause of failure.

[4] When plugging in the power supply to the system, it instantly powers up.

The PPC system can be set to operate in either AT or ATX modes.

In AT mode, the system automatically starts when the power is connected.

To change the power on mode, remove the plastic back cover. There is a switch with a mode select label. If you do not want the system to automatically start up upon power restore, switch to ATX mode. Even in ATX mode, there is a setting in the BIOS to allow for automated power recovery after power loss. Please consult the manual for additional information

[5] Windows XP can not find a Bluetooth device. (If Bluetooth enabled)

- Ensure the Bluetooth software/driver is installed properly.
 - To verify the software/driver is properly installed in Windows, go to Start->Setting->Control Panel->Add/Remove Program and search for "BlueSoleil". If "BlueSoleil" is on the program list then the software/driver is installed properly.
 - If you can not find "BlueSoleil" on the list, please re-install the software/driver.
- Check the BIOS setting to ensure all USB ports are enabled.
 - o To check the BIOS setting, you will need a USB keyboard.
 - o Make sure the computer is powered off. If not, shut down the computer.
 - o Power up the system.
 - After the beep sounds, press the "Delete" or "Del" key on the right hand of the keyboard until it shows the BIOS Setup Utility.
 - o At the Bios Setup Utility, use the arrow key to select the Advanced tab.
 - Under the Advanced menu, select the USB configuration. In the USB configuration, make sure the "USB 1.1 Port Configuration" set to "USB 6 Ports".

[6] BSOD (Blue Screen of Death) or error message pops up during installation of application software or a device driver.

- Ensure all connections are properly set and secure.
- Ensure the devices connected to the system are operational.
- Inspect the cables and connectors for any bent pins or damage.
- Note the details (exact text) of the error code or message to determine the cause of the error. A Google search of this message will often provide a resolution.
- Ensure the system temperature is within specification (not overheating).
- Verify the CPU fan speed (RPM) is set correctly in the BIOS.

[7] Networking issue, Ethernet indicate light abnormal, connectivity issue.

Network connectivity problems occur when one or more computers cannot communicate with other areas of the network.

A. There are three levels of connectivity problems:

- Loss of connectivity When users cannot access areas of some part of network.
- Intermittent connectivity Although users have access to network resources some of the time, they are still facing periods of downtime. Intermittent connectivity problems can indicate that your network is on the verge of a major break, or your wireless network (if in use) has poor or intermittent coverage.
- 3. **Timeout problems** Timeouts cause loss of connectivity, but are often associated with poor network performance.

Network connectivity problems have various causes but the most common causes for connectivity problems are:

 Network adapters and switch ports have mismatching duplex levels or transfer speed settings.

- Network adapters or switches with transmission rates of 10/100 megabits per second (Mbps) do not switch over correctly. Some autosense settings may not correctly detect the speed of some network adapters.
- The network adapter is incompatible with the motherboard or other hardware or software components and drivers.

B. To troubleshoot network connectivity problems, follow these steps:

- Use the Ping command-line tools to test basic connectivity. Use Ping to isolate network hardware problems and incompatible configurations.
- Check the event logs for network-card-related entries or connectivity-related entries.
- Check whether the network adapter is on the supporting list of the Computer operating system.
- Check other computers that use the same default gateway that are plugged into the same hub or switch. If these computers do not experience network connectivity problems, the problem may be a faulty network adapter on one computer.
- Contact the vendor of the motherboard and update the BIOS of the boards to obtain the latest version.
- Check the network adapter and uplink hardware (hub or switch) for common settings. Make sure that all complementing network resources (network adapter, hub, and switch) are set to the same speed and duplex level.
- Manually set the network adapter of the computer that has connectivity problems to halfduplex and a lower speed.
- Swap the network cable between the failing system and the hub or switch.
- Replace the network adapter with a network adapter that has been tested and proven reliable.

To do this, follow these steps:

- Remove the network adapter diagnostics program.
- Remove the network adapter in Network properties.
- Install the new network adapter.
- Run Network Monitor at the same time on both ends of the network connection.
- After you filter the traces on the addresses of the two systems, compare both traces to see if you can see the same traffic.

[8] USB Troubleshooting in Microsoft Windows XP

Most USB devices require the installation of USB device software drivers before connecting the USB device to the computer. When installing a USB device always follow the documentation from the device's manufacturer.

A. USB devices are detected by the computer but are not working properly.

- Right-click the My Computer icon and select Properties.
- Click the Device Manager tab and open Universal Serial Bus Controllers by clicking the plus sign (+).

One of the following four conditions are displayed (if the device displays in Device Manager and the USB port is working properly).

1. There is a physical problem with the device or there is an issue with the device software drivers.

Try disconnecting the USB device, closing any software for the device that
may be open, uninstalling the USB device software driver, and then
reinstalling the driver. Connect the USB device to the computer after the
software drivers are installed. Refer to the device manufacturer for more
information.

2. If the device displays as an unknown device, check the following items:

 If the USB device is connected to a USB port on a port replicator, unplug it and plug it into a USB port on the notebook.

3. The device may not be getting enough power.

- If other USB devices are connected to the system, remove all other USB devices (except keyboard and mouse) and restart the computer. Check Device Manager again. If this solves the issue, use a powered USB hub to power more devices.
- Disconnect the USB device, close any software for the device that may be open, uninstall the USB device software driver, and then reinstall the device software driver.

4. If the device displays under Other Devices the USB ports are working but the device software drivers need to be installed.

Unplug the USB device and install the software drivers.

B. The device is not listed at all -- USB device not detected by the computer.

Perform the following steps to troubleshoot the USB port when the computer does not detect a USB device:

 Check Device manager to see whether the device displays under the USB section or the Other Devices section.

To do this, follow the procedures below:

- Right-click My Computer, and click Properties
- Double-click the System icon, and then click the Device Manager tab.
- Check for the device under the Universal Serial Bus controllers or under the Other Devices section.
- If the device is found under Universal Serial Bus controllers or Other Devices, then remove the device from Device Manager, disconnect the USB device, restart the computer, and install the USB device software following the manufacturer's suggestions.
- If the USB device is missing, double-click the USB Root Hub, click the Power tab, and then click Power Properties (if it is shown). The available ports and power usage is shown.
- Remove the devices and use a powered HUB if the displayed power is over 500mA. To check the properties of a HUB double-click HUB and the HUB information window will open.
- Remove high-speed USB cables that are over three meters and use high-speed cables that are less than three meters.
- Only use high-speed cables less than 10 feet with high-speed USB devices (Multifunction devices, scanners, and cameras).

• If the USB device is connected to a USB port on a keyboard, unplug it and plug it into a USB port on the computer or a powered HUB.

C. There may be an issue with the USB port.

- Try plugging into a different USB port. If the USB device displays in Device Manager after plugging the cable into a different port, then Uninstall and reinstall the USB device software driver.
- Disconnect all USB devices and use the following steps to remove the USB Host Controller:
 - Restart the computer and press the F8 key repeatedly after the first screen displays. A Startup screen displays.
 - Select Safe Mode and press Enter. Windows starts with Safe Mode displayed in all four corners of the desktop.
 - o Right-click My Computer, and click Properties.
 - Click the (+) plus sign next to the Universal Serial Bus.
 - Select USB Root Hub, and then click Remove. Continue until all USB Root Hubs are removed.
 - Close Device Manager.
 - o Click Start, click Search, and then click all Files and Folders.
 - Set the Look in box to Local Hard (C:;D:).
 - o In the Named box type "usb.inf", then click Find Now.
 - o Right-click USB, then Install.
 - Restart the computer and verify that the USB Root HUB exists in Device Manager.
 - Install the device software driver using the manufacturer's recommended method.
 - Reconnect the USB device.
 - Consult the manufacturer of the device for support if the device still fails to display.

[9] Trouble with sounds (include no sound with CD audio.)

Various conditions may cause this problem. To troubleshoot, check the following:

- Microsoft Volume Control or your mixer program mute options and volume sliders.
- Connect headphones to the stereo phone jack on your CD-ROM drive front panel; adjust the volume control settings on the drive.
- If there is sound from your headphones, check the CD audio cable connection from the CDROM drive to the audio card.
- Ensure the speakers are properly connected to the audio card output connector.

A. Resolving hardware conflicts:

Hardware conflicts occur when two or more devices contend for the same resources. Conflicts between your audio card and another device may occur regarding the I/O address, IRQ line, or DMA channel:

 Right-click the My Computer icon on your desktop, and select Properties. The System Properties dialog appears.

- Click the Device Manager tab. In the Device Manager, a plus sign(+)
 represents an expandable list of items. A minus sign (-) represents an
 expanded list. A circled exclamation mark denotes a conflict.
- Double-click Sound, video, game controllers. A list of multimedia devices appears.
- Select your audio card.
- Choose the Propertis button.
- Click the Resources tab.
- Uncheck the Use automatic settings option.
- Change "Settings based on:" if alternate settings are available.
- Determine the conflict by reviewing the "Conflicting device list".
- Select the conflicting item in the "Resource Settings" list.
- Click the Change Settings button.
- Use the mouse to select a new setting.
- Select OK to close each of the properties windows, and restart your computer.

B. No sound is heard from speakers

Verify the following:

- Check the Microsoft Volume Control or the Audio Mixer Program mute options and volume sliders.
- Ensure the speakers are properly connected to the audio card output connector.
- Check the volume control and power connection of the speakers, if they are amplified. (Refer to the speakers documentation for detailed information).
- Ensure a hardware conflict does not exist between your audio card and another device in your system.
- PCI bus mastering devices may be interfering with the operation of the audio card.
- Temporarily remove non-essential PCI bus mastering devices. If the device is a display card, upgrade the display card drivers, or set the card to the default Windows VGA mode.
- If you are experiencing no sound only during audio CD playback, see "No sound is heard from audio (music) CDs" above.

C. Static sounds are heard in wave files

Check to see if the static sounds are heard in all wave files. If the difficulty occurs only with certain games, refer to the software manufacturer's documentation.

To troubleshoot static sounds heard in all wave files:

- Try different resource settings for the audio card, or set the card to use low DMA.
- Move the audio card to another PCI slot. Feedback from the power supply or another device may be responsible.